REMARKS

Applicants note that the Office Action dated May 14, 2002 is indicated as being responsive to communication(s) filed on October 16, 2001. The communications filed on October 16, 2001, include a preliminary amendment, substitute specification and proposed amendments to the drawings as shown by the attached copy of the postcard receipt evidencing the filing of such papers. However, the office action makes no mention of the proposed drawing correction and sets forth an objection to the disclosure in that there is no description of FIGs. 6(a) & 6(b) and 10(a) & 10(b) in the description of the drawings. However, the substitute specification at page 5 paragraph [0017] and paragraph [0021] provide such descriptions. It is noted that such descriptions have been amended by the present amendment. Accordingly, clarification of the office action is requested with regard thereto.

As to the objection to the drawings FIGs. 8-9 and 10(b), should be designated by legends such as --Prior Art--, submitted herewith are proposed drawing corrections labeling the drawings in the manner suggested by the Examiner.

As to the objection to the drawings under 37 CFR 1.83(a) because they do not number or show the "side face" as described in the specification, this objection is traversed and reconsideration and withdrawal of the objection are respectfully requested.

Applicants note that contrary to the position set forth by the Examiner, as described in paragraphs [0016]-[0019] FIGs. 4 to 8 of the drawings are schematic diagrams showing "the side face of a stator" (emphasis added) with FIGs. 4 to 7 representing embodiments of the present invention and FIG. 8 is representative of a

conventional rotary machine. Applicants submit other portions of the specification describe the showing of the side face of the stator such that as is apparent, the feature of the "side face" is illustrated in the drawings of this application, and this objection to the drawings should now be withdrawn.

As to the objection of claims 1 to 3 regarding errors of grammar and the rejection of claims 1-2 under 35 USC 112, second paragraph as being indefinite, Applicants submit that by the present amendment, the objection and rejection of the claims with regard to errors of grammar and indefiniteness should now be overcome. Accordingly, Applicants submit that claims 1 to 5, as amended should now be considered to be in compliance with 35 USC 112, second paragraph.

Applicants note that by the present amendment to independent claim 1 and the dependent claims have been amended to clarify features of the present invention. Turning to claim 1, for example, Applicants note that claim 1 has been amended to recite the features as described in paragraph [0029] at pages 8 and 9 of the specification, for example, which features are illustrated in FIGs. 1 and 2 of the drawings of this application. That is, as illustrated therein, a stator comprises a stator core 1 having an even number of slots per pole per phase with armature windings contained in the slots and the armature windings being wound in a single layer distributed winding. In accordance with the present invention as illustrated in FIGs. 1 and 2 as described in paragraphs [0024]-[0029] one of the slots arranged between two of the slots contain a first armature winding (U1, for example) contains a second armature winding for a phase different from a phase of the first armature winding, and one of the slots arranged between two of the slots containing the first armature winding contains a third armature winding (V1 or W1, for example) for

phase equal to the phase of the second armature winding (W1 or V1 for example), and coil end portions of the first, second and third armature windings are arranged within a space on a side face of a back yoke portion (1a) of the stator core so that one of the second armature winding and the third armature winding is arranged in a outer peripheral side of the first armature winding and another of the second armature winding and third armature winding is arranged in an inner peripheral side of the first armature winding. As such, Applicants submit that these features are illustrated in the drawings of this application and described in the specification and enable a reduction in axial dimension of the slates as illustrates in Fig. 10(a) in comparison with Fig. 10(b). Applicants submit that claim 1 and the dependent claims thereof patentably distinguish over the cited art as will become clear from the following discussion.

The rejection of claims 1 and 3-4 under 35 USC 102(b) is being anticipated by Broadway, et al. (US 3,673,477); the rejection of claim 2 under 35 USC 103(a) as being unpatentable over Broadway in view of Kakutani, et al. (US 6,141,865); and the rejection of claim 5 under 35 USC 103(a) as being unpatentable over Broadway in view of Auinger (US 4,127,787); such rejections are traversed insofar as they are applicable to the present claims and reconsideration and withdrawal of the rejections are respectfully requested.

At the outset, as to the requirements to support a rejection under 35 USC 102, reference is made to the decision of In re Robertson, 49 USPQ 2d 1949 (Fed. Cir. 1999), wherein the court pointed out that anticipation under 35 USC 102 requires that each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. As noted by the

court, if the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if the element is "inherent" in its disclosure. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill", Moreover, the court pointed out that inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

With regard to the requirements to support a rejection under 35 USC 103, reference is made to the decision of In re Fine, 5 USPQ 2d 1596 (Fed. Cir. 1988), wherein the court pointed out that the PTO has the burden under 103 to establish a prima facie case of obviousness and can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. As noted by the court, whether a particular combination might by "obvious to try" is not a legitimate test of patentability and obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. As further noted by the court, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

Furthermore, such requirements have been clarified in the recent decision of In re Lee, 62 USPQ 2d 1430 (Fed. Cir. 2002) wherein the court in reversing an obviousness rejection indicated that deficiencies of the cited references cannot be

remedied with conclusions about what is "basic knowledge" or "common knowledge".

The court point out:

> The Examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is immaterial to patentability, and could not be resolved on subjected belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher."... Thus, the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion. (emphasis added)

Irrespective of the Examiner's contention concerning the applicability of Broadway, et al. to the recited features of claim 1, Applicants submit that the Examiner has merely identified particular windings and slots contending that such meet the claim limitations without regard to the disclosure of Broadway et al, and such features are not disclosed in Broadway, et al. Applicants submit that the coil end portion arrangement of Broadway et al, at least, results in an arrangement corresponding to that illustrated in FIG. 10(b) of the drawings of this application with the attendant disadvantages as described in paragraph [0005] at page 2 of the specification with FIG. 10(a) representing the structural arrangement in accordance with the present invention as described in paragraph [0035] wherein the total axial length of the rotary electric machine, including the axial length of the stator core in the heights of the coil end portion can be reduced so that the thickness of the rotary electric machine can be reduced. Applicants submit that the features as recited in

independent claim 1 and the dependent claims, contrary to the position set forth by the Examiner are not disclosed by Broadway, et al. in the sense of 35 USC 102. That is, Applicants submit that irrespective of the comments by the Examiner, it is not seen that Broadway, et al. discloses first, second and third armature windings arranged in slots in the manner defined in claim 1 with the coil end portions of the first, second and third armature windings being arranged within a space on a side face of a back yoke portion of the stator core so that one of the second and third armature windings is arranged in an outer peripheral side of the first armature winding and another of the second and third armature windings is arranged in an inner peripheral side of the first armature winding which enables the construction as illustrated in FIG. 10(a) of the drawings in this application. Thus, Applicants submit that claim 1 and the dependent claims patentably distinguish over Broadway, et al. in the sense of 35 USC 102 and 35 USC 103 and should be considered allowable thereover.

With respect to independent claim 1 and the dependent claims, Applicants submit that it cannot be considered obvious in the sense of 35 USC 103 to provide the claimed features as recited in claims 1 to 5 and that the additional cited art fails to overcome the deficiencies of Broadway, et al. as pointed out above such that all claims present in this application should be considered allowable over Broadway, et al. taken alone or in combination with Kakutani, et al. or Auinger. In this regard, it is noted that the Examiner contends that it would be obvious to combine such features and Applicants submit that such represents a hindsight reconstruction attempt which does not result in the claimed features therein. See In re Fine, supra and In re Lee, supra. Accordingly, Applicants submit that all claims should be considered to

patentably distinguish over the cited and should be considered allowable at this time.

In view of the above amendments and remarks, Applicants submit that all claims present in this application should now be considered to be in compliance with 35 USC 112 and to patentably distinguish of the cited art. Accordingly, issuance of an action of the favorable nature is courteously solicited.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current Amendment. This marked-up version is on the attached pages, the first page of which is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE".

To the extent necessary, Applicants petition for an extension of time under 37 CFR § 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Deposit Account No. 01-2135 (Case No. 503.39902X00) and please credit any excess fees to such Deposit Account.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

Please delete paragraph [0017] in its entirety, and substitute therefor the following new paragraph:

[0017] FIGs. 6(a) and 6(b) are [a] schematic diagrams showing the side face of a stator representing a fourth embodiment of a rotary electric machine in accordance with the present invention;

Please delete paragraph [0021] in its entirety, and substitute therefor the following new paragraph:

[0021] FIGs. 10(a) and 10(b) are [a] plan views illustrating the dimension in an axial direction of a stator of a rotary electric machine in accordance with the present invention and a conventional rotary electric machine, respectively.

Please delete paragraph [0029] in its entirety, and substitute therefor the following new paragraph:

[0029] After all, the stator constructed as described above comprises a stator core having an even number of slots per pole per phase; and armature windings contained in the slots, the armature windings being wound as a single layer distributed winding, wherein one of the [slot] slots arranged between two of the slots containing a first armature winding contains a second armature winding for a phase

different from a phase of the first armature winding, and one of the slots arranged between two of the slots containing the first armature winding contains a third armature winding for a phase equal to the phase of the second armature winding; and, one of the second armature winding and the third armature winding is arranged in a coil end portion in an outer peripheral side of the first armature winding, and the other is arranged in an inner peripheral side of the first armature winding. As a result, the axial dimension of the stator can be reduced by decreasing the projected dimension of the coil end portions of the windings contained in the stator core.

Please delete paragraph [0034] in its entirety, and substitute therefor the following new paragraph:

[0034] [FIGs. 10(a) and 10(b) are plan views] FIG. 10(a) is a plan view illustrating the axial dimension of the stator in the first and the second embodiments, which illustrations are provided so as to provide a comparison with a plan view of the axial dimension of the conventional rotary electric machine as represented by FIG. 10(b).

IN THE CLAIMS

Please amend the claims presently in the application as follows:

1. (Amended) A stator comprising a stator core having an even number of slots per pole per phase; and armature windings contained in said slots, said armature windings being [wounded] wound in a single layer distributed winding,

wherein

one of said [slot] slots arranged between two of said slots containing a first armature winding contains a second armature winding for a phase different from a phase of said first armature winding, and one of said [slot] slots arranged between said two of said slots containing said first armature winding contains a third armature winding for a phase equal to the phase of said second armature winding, and coil end portions of said first, second and third armature windings are arranged whether a space on a side face of a back yoke portion of said stator core so that one of said second armature winding and said third armature winding is arranged [in a coil end portion] in an outer peripheral side of said first armature winding, and [the] an other with said second armature winding and said third armature winding is arranged in an inner peripheral side of said first armature winding.

2. (Amended) A stator according to claim 1, [which is constructed by partially performing winding work of said armature windings to] wherein said stator core comprises a plurality of [divided cores] core portions formed by laminating segments stamped in a sector; [and then assembling] said plurality of [divided cores] core portions being assembled into a cylindrical shape and [containing] said armature windings [spreading] being spread over said [divided cores] core portions into [the] individual slots of said stator core.

3. (Amended) A stator according to any one of claims 1 and 2, wherein a dimension of said stator in an axial direction including said stator core and

said coil end portions is reduced by arranging said coil end portions in [a] the space near [a] the side face of [a] the back yoke portion.